OUTREACH MEETING DISCUSSION SUMMARY MEETING DATE FEBRUARY 19, 2010

County Staff in attendance: Sharon Goetz, Manager of Permitting Services

Bryon Mitchell, Manager, Office of Life Safety

David Doyle, Chief Building Inspector Larry Willard, Chief Plumbing Inspector

John Picco, Chief, Plan Review

Pamela Moulton, Customer Service Supervisor

Emily Roche, Administrative Specialist

This Permitting Outreach Meeting had a primary focus on Frederick County Code Updates and Fee Concerns. Several informational handouts were distributed and are available following this summary.

Agenda items discussed:

> Frederick County Code Adoption Update

- The proposed amendments to the IBC, IRC and IPC will be presented to the County Attorney on March 1, 2010; with an adoption date of 7/1/2010. Frederick County is on track for the proposed deadline.
- All requests for code changes need to be submitted to Bryon Mitchell by end of business day Thursday, February 25.
- o Currently no public recommendations for changes have been submitted.
- The main objective was to make the code more "pure"- Frederick County has deleted many of the past and previous code amendments to reach this objective.
- The Building Code Amendment for agricultural buildings is subject to change.
 Frederick County staff were scheduled to meet on February 19, 2010 to examine the local Building Code Amendment in reference to the Zoning Ordinance,
 COMAR regulations and the IBC and IRC.
- Plumbing Code- There were numerous changes suggested for the Plumbing Code- two of the main code changes are:

604.8 before exception add: an ASSE 1024 dual check valve shall be installed after the pressure reducing valve on the system side in 1 and 2 family dwellings

608.16.4 add sentence to existing code: Exception: Residential 13D systems installed in 1 and 2 family dwellings shall be protected by an ASSE 1024 (Frederick County already deletes exceptions existing in code.

*The Plumbing Code has been cleaned up and items have been reorganized to be in a more logical place.

Electrical Code-At this time no changes are being made to the NEC, however there may be proposed Frederick County Ordinance changes to update any outdated information in the County Electrical Code, such as fee amounts that have changed since the adoption of the DPDR fee schedule. Please visit our website to view other useful information regarding Code Updates: http://www.FrederickCountyMD.gov/permit.

> New Insulation Inspection

- State of Maryland's adoption of the International Energy Conservation Code (IECC) has mandated Frederick County to require INSULATION inspections.
- The International Energy Conservation Code has mandated Insulation inspections in an effort to address energy conservation requirements, to be energy efficient and to optimize the use of fossil fuels and depletable and nondepletable resources.
- This inspection will be a new inspection required by Frederick County. Currently
 after electrical and plumbing rough- in inspections the building framing
 inspection is done. The insulation inspection will minimally affect this sequence
 of inspections. Please see handout pertaining to the revised sequence of
 inspections.
- The effective date of this new requirement will be July 1, 2010.
- Frederick County Inspectors will begin enforcing the new requirement beginning
 September 1, 2010.
- Contact David Doyle, Chief Building Inspector, with any questions or concerns regarding Insulation Inspections.

> Fees

- o In preparation for our Department's annual fee updates that occur each July $\mathbf{1}^{\mathsf{st}}$, we would like to provide you the opportunity to let us know of any specific fee concerns that you may have.
- O During March and April we will be evaluating the fee schedule and reviewing any problems we have encountered, any concerns that have been raised, and also consider possible adjustments. Tentatively the Index should be issued in March which will determine the July 1st automatic fee adjustment.
- Email Sharon Goetz at <u>SGoetz@FrederickCountyMD.gov</u> with any fee concerns or suggestions.

Concerns brought to Permitting's attention:

- Master Plumbers License- Frederick County's Master License fee is the highest out of all the local jurisdictions. The reason that it rose to its current amount was for consistency with the Frederick County Electrical licenses. The question to cap the plumbing license fee was proposed. This question will be discussed during staff meetings with the Division director.
- Can Impact and Excise Fees be paid at the time of Use and Occupancy Issuance? Excise and Impact Fees are not Permits and Inspections' fees- these types of questions should be directed to Linda Williamson

- (<u>LWilliamson@FrederickCountyMD.gov</u>), as the Impact Fee Ordinance will be revised in the near future.
- When a replacement permit is necessary, why does the difference in impact fees have to be paid if the house is well under construction? This question has come up more often due to the economy and will be considered when changes to the Impact Fee Ordinance are considered in the near future.
- Please note: The entire DPDR fee schedule is automatically adjusted according to a specific index by resolution each year. Very minor fee adjustments may be included in the proposed fee schedule that is submitted to the Board of County Commissioners.

> Additional Comments and Questions

- O A concern of Mr. Denny, of Seawright Homes, was regarding Certificates of Occupancy that are for property located in an incorporated town. Currently, a courier pick up or mailing of the COO are the only methods of processing the COO to the town. The town must actually issue the COO to the Applicant as the final approval, since they have their own Zoning regulations. Sharon will contact each of the incorporated towns to see if other arrangements can be made or if this is still the best procedure. We must handle all incorporated towns the same, so coming to an agreement will be necessary.
- Snow load was not discussed, however, several handouts were distributed which should answer many citizen and contractor concerns regarding the most recent winter weather. Frederick County received many inquiries about the safety of snows on residential and nonresidential structures.

Please note: This ends the published discussion summary, which may not include all discussion that occurred. It is not intended to be actual minutes of the meeting.

outreach meeting discussion summary Feb 2010/emr



PERMITTING AND DEVELOPMENT REVIEW DIVISION FREDERICK COUNTY, MARYLAND

Department of Permits and Inspections

30 North Market Street • Frederick, Maryland 21701 Phone (301) 600-2313 • Fax (301) 600-2309

PERMITTING OUTREACH MEETING

NUMBER 25

February 19, 2010 @ 9:00am DPDR Meeting Room, Lower Level 30 North Market Street

AGENDA

- I. Introductions
- II. Frederick County Codes Adoption Update Codes scheduled for adoption of the 2009 version:
 - ❖ IBC International Building Code
 - IRC International Residential Code
 - ❖ IPC International Plumbing Code
- III. New Insulation Inspection
- IV. Fees In preparation of our Department's annual fee updates that occur each July 1st, we would like to provide you the opportunity to let us know of any specific fee concerns that you may have.
- V. Open discussion of other topics
 ***Please note that there will be discussion about the changes in stormwater regulations at a
 future meeting.

To propose topics of discussion for future Permitting Outreach Meetings, contact Sharon Goetz at SGoetz@FrederickCountyMD.gov.

****Next Meeting Date: April 9, 2010****

Remaining 2010 Meeting Schedule

April 9, 2010
June 4, 2010
August 6, 2010
October 1, 2010

December 3, 2010

Please note that Permitting Outreach meetings are held every other month on the first Friday of the month at 9:00AM, unless a holiday falls on that date. In 2010, the first Friday in April is a County holiday (Good Friday), so the meeting will be held the following Friday instead.



PERMITTING AND DEVELOPMENT REVIEW DIVISION FREDERICK COUNTY, MARYLAND

Department of Permits and Inspections

30 North Market Street • Frederick, Maryland 21701 Phone (301) 600-2313 • Fax (301) 600-2309

Frederick County Building Code Insulation Inspections

- Mandated by the State of Maryland's adoption of the International Energy Conservation Code (IECC) effective January 1, 2010. Frederick County target effective date of July 1, 2010.
- ➤ Goals of the IECC
 - To address energy conservation requirements for all aspects of energy uses in both commercial and residential construction.
 - To ensure that building envelopes are designed to be energy efficient.
 - To require that the installation of energy efficient mechanical, lighting and power systems emphasize performance thereby saving resources.
 - To require designs that will result in the optimal utilization of fossil fuels and nondepletable resources.
- > Revised sequence of Building Inspections to incorporate Insulation Inspection
 - Framing Inspection Check for current requirements with new emphasis on:
 - o Verify Shear Wall Bracing installation
 - o Verify Wind Bracing installation
 - Verify Sheathing installation
 - Verify Floor to Floor/Foundation connections for Wind Shear
 - o No Siding or Brick Veneer to be installed at this stage
 - Mechanical, Electric, Plumbing and Fire Systems rough-ins inspected.
 - Verify MEP installation did not compromise framing.
 - Insulation Inspection Close in Inspection
 - Final Inspection
 - o Verify Insulation in Attic and Unfinished Basements

CHAPTER 1-6: BUILDINGS

ARTICLE I: IN GENERAL

Section

1-6-1 -1-6-15 Reserved

§§ 1-6-1 – 1-6-15. RESERVED.

ARTICLE II: BUILDING CODE

Section

1-6-16 Adopted

1-6-17 Revisions

1-6-18A Local amendments to International Building Code

1-6-18B Local amendments to International Residential Code

1-6-19 Severability

1-6-20 Civil building infractions

1-6-21 Penalties

1-6-22 Saving clause

Cross references:

Adequate public facilities, see Chapter 1-20;

Approval of building permits, see § 1-16-10;

Building permits, see § <u>2-4-1</u>;

Department of Permits and Inspections, see §§ <u>1-2-49</u> et seq.;

(D) Substitute "Department of Permits and Inspections" for the term "Department of Building Safety" wherever it appears in the Building Code.

(Ord. 80-21-173, 7-15-1980; Ord. 82-6-250, 4-13-1982; Ord. 89-15-546, 3-21-1989; Ord. 02-06-302, 4-4-2002)

§ 1-6-18A. LOCAL AMENDMENTS TO INTERNATIONAL BUILDING CODE.

The International Building Code, 2006 2009 Edition as adopted by the State of Maryland in the Maryland Building Performance Standards (COMAR 05.02.07) is hereby amended as described and shown below:

Subsection 101.2 is hereby amended by adding the following exception:

Exception 2: Agricultural Buildings. The provisions of this code shall not apply to the construction, alteration, addition, repair, removal, demolition, use, location or maintenance of agricultural buildings. This provision does not exempt the owner from obtaining required electrical or plumbing permits, nor from complying with all other applicable local, state and federal regulations, laws, and ordinances. An "agricultural building" for purposes of this subsection means a building or structure utilized for agricultural activity as defined in the Frederick County Zoning Ordinance. THIS EXEMPTION PER THE ZONING ORDINANCE APPLIES TO PROPERTIES OF 25 ACRES OR MORE THAT ARE ZONED AGRICULTURAL.

Subsection 101.2.1. Appendices, is hereby amended with the addition of the following language:

Provisions in the appendices shall not apply unless specifically adopted. THE FOLLOWING APPENDICES ARE ADOPTED IN THEIR ENTIRETY:

APPENDÍX C, GROUP U, AGRICULTURAL BUILDINGS

APPENDIX F, RODENT PROOFING

APPENDIX G, FLOOD RESISTANT CONSTRUCTION

APPENDIX H, SIGNS

<u>APPENDIX I, PATIO COVERS</u>

JUSTIFICATION: THE LISTING OF ADOPTED APPENDICES IS MORE LOGICAL UNDER THIS SECTION THAN WHERE PREVIOUSLY DELINEATED

Subsection 101.4.1 is hereby amended to read as follows:

conforms to the requirements of this code and laws and ordinances applicable thereto, the building official shall issue a permit therefore as soon as practicable.

Subsection 105.3.2. is hereby amended to read as follows:

105.3.2 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

Subsection 105.5 is hereby amended to read as follows:

Expiration. Every permit issued shall expire one year from the date of issuance unless the final building inspection has been approved, or an extension has been granted. The building official is authorized to grant, in writing, a one (1) year extension prior to the expiration date of the permit, provided that work on the site authorized by such permit is commenced within (one) 1 year of permit issuance. Commencement of work is evidenced by the building official's approval of the first required building inspection. The extensions shall be requested in writing and justifiable cause demonstrated.

Subsection 107.1 108.1 is hereby amended to read as follows:

107.1—108.1 General. The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 1 year.

Subsection 1412 is deleted in its entirety and amended to read as follows:

a certificate issued. When a structure is entitled thereto, the code official shall issue a certificate of occupancy upon completion of the final inspections in accordance with Section 110.3.10, correction of the violations and discrepancies, and approval for occupancy is given from the departments and agencies that gave approvals for the issuance of the zoning certificate/building permit.

JUSTIFICATION: THE CONTENT OF THIS SECTION WAS UNCHANGED, HOWEVER IT WAS MOVED TO CORRESPOND TO REVISIONS OF SECTION NUMBERING IN THE IBC.

Subsection 111.4 112.4 is hereby amended ADDED to read as follows:

JUSTIFICATION: TO CORRECT A TYPOGRAPHICAL ERROR

111.4 112.4 Service connections. Before a structure is demolished or removed, the owner or agent shall notify all utilities having service connections within the structure such as water, electric, gas, sewer and other connections.

Subsection 903.2.7, Group R, is hereby deleted and replaced with the following:

Approved automatic sprinkler systems in accordance with 903.3 shall be provided throughout all buildings with a Group R fire area and as required by the Frederick County Sprinkler Ordinance (No. 06-26-422).

JUSTIFICATION: IT WAS DETERMINED THAT THE AMENDMENT WAS NOT NECESSARY UNDER THE PROVISIONS OF THE IBC.

Subsection-903.2.8 903.2.9, Group S-1, is hereby amended by adding a new subparagraph 4 as follows:

4<u>5</u>. Throughout all mini storage buildings <u>WITH FIRE</u> areas greater than 2500 square feet in area.

JUSTIFICATION: TO BE CONSISTENT WITH REVISIONS TO NFPA #1, THE FIRE CODE.

Subsection 903.4.3, Floor control valves, is hereby amended to read as follows:

Approved supervised indicating control valves shall be provided at the point of connection to the riser on each floor in multi-story buildings. Each floor of a building shall be zoned separately with maximum zone sizes in accordance with the provisions of NFPA #13. Fire alarm zones shall coincide with sprinkler system zones.

Subsection 905.2, Installation standards, is hereby amended to add two exceptions as follows:

Exceptions:

- (1) The residual pressure requirements from an automatic water supply are not required in buildings equipped throughout with an approved automatic sprinkler system and where the highest floor level is not more than 75 feet above the lowest level of the Fire Department access. Pipe sizes shall be hydraulically calculated based on maintaining a residual pressure of 100 psi flowing 500 gpm at the hydraulically most remote hose outlet based on a pressure of 150 psi available at the Fire Department connection. An additional 250 gpm shall be added at the point of connection for each additional riser up to a maximum of 1250 gpm. The minimum riser pipe size shall be 4" nominal diameter.
- (2) All Class I standpipes shall have a minimum size hose connection of $2\frac{1}{2}$ " and shall be equipped with a $1\frac{1}{2}$ " reducing adapter.

Subsection 905.4, Location of Class I standpipe hose – connection, is hereby amended and modified to read as follows:

1. In every required stairway, a hose connection shall be provided for each floor level above or below grade. Hose connections shall be located at the level of stair entry.

than the total required width of all means of egress leading to the exit. In assembly occupancies, other than those listed above, the main entrance/exit shall be a width that accommodates one-half of the total occupant load. Where the building is classified as a Group A occupancy, the main exit shall front on at least one street or an unoccupied space of not less than 10 feet (3048 mm) in width that adjoins a street or public way. (The exception remains unchanged)

Chapter 11, Accessibility, is hereby deleted in its entirety and the following is adopted:

CHAPTER 11 ACCESSIBILITY. THE PROVISIONS OF IBC CHAPTER 11 SHALL APPLY TO ALL MATTERS AFFECTING HANDICAPPED ACCESSIBILITY EXCEPT WHERE THE PROVISIONS OF THE MARYLAND ACCESSIBILITY CODE. STATE REGULATION COMAR 05.02.02 ARE MORE STRINGENT IN WHICH CASE THEY SHALL APPLY.

JUSTIFICATION: TO ENSURE THAT THE MOST STRINGENT REQUIREMENTS ARE APPLICABLE IN REGARD TO HANDICAPPED ACCESSIBILITY.

Subsection 1405.12.2, Window sills, is hereby amended by adding a new exception No. 3:

3. Windows with sash stops that will engage automatically so as not to allow a 4" diameter (102 mm) sphere to pass through the window opening and that shall readily manually disengage so as to allow emergency egress, ventilation or other occupant needs.

JUSTIFICATION: REVISIONS TO THIS SECTION OF THE IBC MAKE THE AMENDMENT SUPERFLUOUS.

— Subsection 1607.11.2 is hereby amended by adding the following:

Subsection 1607.11.2 is hereby amended by adding the following:

1607.11.2... THE DESIGN ROOF LOAD OF ANY ROOF SHALL BE THIRTY (30)
PSF OR GREATER FOR GROUND SNOW LOAD EXCEPT AS REQUIRED BY FIGURE
1608.2

JUSTIFICATION: IT WAS DETERMINED THAT THE REQUIREMENTS OF THE PREVIOUS AMENDMENT WERE TOO RESTRICTIVE AND THAT ADEQUATE SAFETY FACTORS ARE ACCOUNTED FOR IN THE CODE. THE 30 PSF REQUIREMENT WAS CHOSEN IN THE PROPOSED REVISED AMENDMENT TO HAVE A DESIGN THAT WOULD BE CONSISTENT WITH THE VAST MAJORITY OF AREAS IN THE COUNTY.

Subsection-1805.2.1 1809.5, Frost protection - Exception 2, is hereby amended as follows:

2. Area of 400 square feet or less; and

§ 1-6-18B. LOCAL AMENDMENTS TO INTERNATIONAL RESIDENTIAL CODE.

The Board of County Commissioners hereby adopts the International Residential Code, 2006 2009 Edition including the amendments adopted by the State of Maryland in the Maryland Building Performance Standards (COMAR 05.02.07) with the amendments described and shown below.

DELETE SUBSECTION R102.7.1 IN ITS ENTIRETY AND REPLACE WITH THE FOLLOWING:

THE ALTERATION, REPAIR, ADDITION AND CHANGE OF OCCUPANCY OF EXISTING STRUCTURES IN FREDERICK COUNTY SHALL BE GOVERNED BY THE MARYLAND BUILDING REHABILITATION CODE (INTERNATIONAL EXISTING BUILDING CODE 2009) ADOPTED UNDER THE AUTHORITY OF THE STATE OF MARYLAND, DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT, ARTICLE 83B, SUBSECTION 6-503, ANNOTATED CODE OF MARYLAND.

JUSTIFICIATION: TO BE CONSISTENT WITH THE IBC IN REGARD TO EXISTING STRUCTURES AND TO AFFIRM THAT THE MARYLAND REHAB CODE USES THE IEBC AS ITS CONTROLLING DOCUMENT.

Subsection R105.2, Work exempt from permit - Subparagraph 1 is hereby deleted and replaced with the following:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 150 square feet.

SUBSECTION R105.2 IS HEREBY AMENDED TO ADD THE FOLLOWING:

R105.2 (11) AGRICULTURAL BUILDINGS. THE PROVISIONS OF THIS CODE SHALL NOT APPLY TO THE CONSTRUCTION, ALTERATION, ADDITION, REPAIR, REMOVAL DEMOLITION, USE, LOCATION OR MAINTENANCE OF AGRICULTURAL BUILDINGS. THIS PROVISION DOES NOT EXEMPT THE OWNER FROM OBTAINING REQUIRED ELECTRICAL OR PLUMBING PERMITS. NOR FROM COMPLYING WITH ALL OTHER APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS, LAWS, AND ORDINANCES AN AGRICULTURAL BUILDING" FOR PURPOSES OF THIS SUBSECTION MEANS A BUILDING OR STRUCTURE UTILIZED FOR AGRICULTURAL ACTIVITY AS DEFINED IN THE FREDERICK COUNTY ZONING ORDINANCE. THIS EXEMPTION PER THE ZONING ORDINANCE APPLIES TO PROPERTIES OF 25 ACRES OR MORE THAT ARE ZONED AGRICULTURAL.

Subsection R105.5 - Expiration, is hereby deleted and replaced with the following:

Winter Design Temp. = 12 deg. F

Table R301.2(1) is hereby modified by the addition of the following:

Ice shield underlayment requirement = Yes

Flood hazard = As determined by Division of Planning and Zoning

Air freezing index = Greater than 1,500

Mean annual temperature = 52 degrees Fahrenheit

Subsection R305.1, Minimum height - A new exception No. 4 is hereby added as follows:

4. Bathrooms shall have a minimum ceiling height of 6 feet 8 inches (2036 mm) at the center of the front-clearance area for fixtures as shown in Figure R307.1. A shower or tub equipped with a showerhead shall have a minimum ceiling height of 6 feet 8 inches (2036 mm) above a minimum area of 30 inches (762 mm) by 30 inches (762 mm) at the showerhead. Where there is a tub, the minimum ceiling height of 6 feet 8 inches (2036 mm) shall apply to the entire fixture.

JUSTIFICATION: REVISIONS TO THE TEXT OF THE CODE MAKE THE AMENDMENT UNECESSARY.

Subsection R309.4 R309.2 Carports. Exception is deleted in its entirety.

Subsection R310.1 is hereby amended by changing the first sentence to read as follows, and adding an exception:

R310.1 Emergency escape and rescue required. All new basements with habitable, occupiable, or sleeping space shall have at least one openable emergency and rescue window or exterior door opening for emergency escape and rescue. If the basement includes sleeping rooms, each sleeping room must have at least one openable emergency and rescue window or exterior door opening for emergency escape and rescue.

JUSTIFICATION: IT WAS DETERMINED THAT TO REQUIRE OPERABLE EMERGENCY OPENINGS IN OCCUPIABLE SPACES (CLEAR HEIGHT OF 5 TO 7 FEET) SUCH AS CRAWL SPACES WAS UNREASONABLE.

Subsection R311.4.3, Landings at doors - Exceptions 2 and 3 are hereby amended to replace text "7-3/4 inches (196 mm)" with text "8-1/4 inches".

JUSTIFICATION: TO BE CONSISTENT WITH REVISIONS MADE BY THE STATE.

Subsection R312.2, Guard Opening Limitations The first sentence is hereby modified to read as follows:

Subsection R403.3, Frost protected shallow foundations, is hereby deleted in its entirety.

JUSTIFICATION: IT WAS DETERMINED THAT THE AMENDMENT WAS TOO RESTRICTIVE FOR THE INTENT OF THE CODE.

Tables R404.1(1), R404.1(2) and R404.1(3) are deleted in their entireties.

Subsection R404.1 is hereby deleted and replaced with the following text:

R404.1 Concrete and masonry foundation walls. Concrete and masonry foundation walls shall be selected and constructed in accordance with the provisions of Section R404 or in accordance with ACI 318, ACI 332, NCMA TR68 A of ACI 530/ASCE 5/TMS 402 or other approved structural standards. When ACI 318, ACI 332 or ACI 530/ASCE 5/TMS 402 or the provisions of Section R404 are used to design concrete or masonry foundation walls, project drawings, typical details and specifications are not required to bear the seal of the architect or engineer responsible for design, unless otherwise required by the state law of the jurisdiction having authority.

JUSTIFICATION: CHANGES TO THE CONTENT OF THE CODE MAKE THE AMENDMENTS UNECESSARY.

Subsection R405.1, Concrete or masonry foundation - The following language shall be added to the end of the exception:

Or as otherwise approved in accordance with the Catoctin and Frederick Soil Conservation District Maps (issued May 1985 2001, as amended).

R613.2. Window sills - A new exception No. 3 is hereby added as follows:

Windows with sash stops that will engage automatically so as not to allow a 4" diameter (102 mm) sphere to pass through the window opening and that shall readily manually disengage so as to allow emergency egress, ventilation or other occupant needs.

JUSTIFICATION: REVISIONS TO THE TEXT OF THE CODE MAKE THE AMENDMENT UNECESSARY.

R807.1 ATTIC ACCESS IS HEREBY AMENDED TO ADD THE FOLLOWING:

WHERE AIR-HANDLING UNITS OR WATER HEATERS ARE INSTALLED IN ATTICS IN RESIDENTIAL STRUCTURES, ACCESS TO THE ATTIC OPENING SHALL BE PROVIDED BY A PERMANENT OR PULL-DOWN STAIRWAY IN ALL NEW CONSTRUCTION.

JUSTIFICATION: TO BE CONSISTENT WITH THE REQUIREMENTS OF THE STATE.

IRC Appendix C Exit terminals of mechanical draft and direct vent venting systems, is hereby adopted in its entirety.

JUSTIFICATION: ALREADY COVERED UNDER THE PROVISIONS OF THE INTERNATIONAL MECHANICAL GAS CODE.

— IRC Appendix D—Recommended procedure for safety inspection of an existing appliance installation, is hereby adopted in its entirety.

JUSTIFICATION: THIS FUNCTION IS BEYOND THE AUTHORITY OF DPDR.

IRC Appendix E -Manufactured housing used as dwelling, is hereby adopted with the following amendments:

The definition of manufactured home in Appendix E, AE201 is hereby deleted and replaced with definition of manufactured home in IRC Chapter 2.

Sections AE302, AE303, AE304 are hereby deleted in their entirety and Chapter 1, Administration, as adopted by Frederick County shall govern applications for permits, permit issuance, and fees.

IRC Appendix F, Radon control methods, is hereby adopted, with the following amendments:

Addition of the following exception:

Buildings in which an approved mechanical crawl space ventilation system or other equivalent system is installed, or that are passively ventilated in accordance with section R408.2 of this code.

Sections AF103.5.3 and AF103.6.1 are hereby amended to add the following text:

Vent pipe must extend vertically straight through the roof for passive sub-membrane depressurization systems.

Exception: A maximum of two (2) NO SINGLE OFFSET SHALL EXCEED 45 degrees elbows will be allowed to jog the vent pipe around an obstacle.

JUSTIFICATION: TO ALLOW REASONABLE FLEXIBILITY FOR THE INSTALLATION OF PASSIVE RADON DEPRESSURIZATION SYSTEMS.

IRC Appendix G, Swimming pools, spas and hot tubs, is hereby adopted in its entirety.

IRC Appendix H - Patio covers, is hereby adopted in its entirety.

IRC Appendix J - Existing buildings and structures, is hereby adopted in its entirety.

PLUMBING ORDINANCE PROPOSED CHANGES – DRAFT FOR ADOPTION OF 2009 IPC

DRAFT REVISION #1, 02/19/10

ARTICLE I: IN GENERAL LICENSES

Section

1-14-1 Licensing of plumbers

1-14-2 Licensing for On-Site Utility Contractors

1-14-3 LICENSING FOR APPLIANCE INSTALLERS (RELOCATED FROM ARTICLE IV)

1-14-4 EXPIRATION

1-14-5 REFUSAL OR REVOCATION

Cross references:

§ 1-14-1. LICENSING OF PLUMBERS.

- (A) All master plumbers shall make application approved by the Director <u>ADMINISTRATIVE AUTHORITY</u> of Permits and Inspections accompanied by a fee as set by a resolution of the Board of County Commissioners and a performance bond in the amount of \$2,000 conditioned upon the applicant's proper installation of all work.
- (B) All jJourneymen plumbers shall make application approved by the Director <u>ADMINISTRATIVE AUTHORITY</u> of Permits and Inspections accompanied by a fee as set by a resolution of the Board of County Commissioners and shall not be required to give bond.
- (C) All septic system installers shall make application approved by the Director ADMINISTRATIVE AUTHORITY of Permits and Inspections accompanied by a fee as set by a resolution of the Board of County Commissioners and a performance bond in the amount of \$2,000 \$10,000 conditioned upon the applicant's proper installation of all work. Such bonds when required shall be in a form prescribed by the Director ADMINISTRATIVE AUTHORITY of Permits and Inspections.
- (D) All master plumbers licensed as aforesaid shall need a septic system installer's license if they install septic systems. If such master plumber installs plumbing and septic systems he shall not be required to give 2 1 bonds as aforesaid, but 1 bond shall suffice AS DESCRIBED IN (C) ABOVE.
- (E) All licenses shall be issued for a period of 2 years but may be refused or revoked by the Director ADMINISTRATIVE AUTHORITY of Permits and Inspections in the event it is

- (1) On-site utility contractors may perform on-site utility work as defined in § 2-13-21(A) of the public local laws of Frederick County.
- (2) All on-site utility contractor workers performing work on-site must have OSHA training on confined space and trench safety, as defined in § 1-14-2(B)(3) and (4).
- (3) Work must comply with the Frederick County water and sewer specifications and standards for water mains, sanitary sewers and related structures, as well as related code provisions adopted by the Frederick County Board of County Commissioners.

(Ord. 05-34-395, 12-1-2005)

MOVE §1-14-97 APPLIANCE INSTALLERS THAT IS CURRENTLY IN ARTICLE V. 1-14-97, TO HERE IN ARTICLE I. TO BE §1-14-3.

§1-14-3 <u>LICENSING OF APPLIANCE INSTALLERS</u>

§ 1-14-97. APPLIANCE INSTALLERS.

- (A) Definition. Appliances are limited to only those that fall within the specific license subcategory classifications of this section. All pressure vessels are excluded and must be installed by a Frederick County-licensed master plumber.
- (B) Permit required, issuance. No plumbing appliance shall be installed without a permit from the Frederick County Plumbing Inspector. Such permit shall be issued in accordance with § 1-14-97, provided that appliances may be installed by either a licensed plumber or licensed appliance installer.
- (C) Application, fee, certificate of insurance. All appliance installers shall make application approved by the Frederick County Advisory Plumbing Board accompanied by:
- (1) A copy of their Maryland state license or a license from a jurisdiction recognized by the State of Maryland;
 - (2) Proof that the applicant has no outstanding Frederick County Code violations;
 - (3) A fee as set by resolution of the Board of County Commissioners; and
- (4) A certificate of insurance in the amount of \$300,000 for property damage and liability insurance in the amount of \$100,000, making the total property damage and liability insurance required to be \$400,000.
- (D) Inspection and approval of installations. All appliance installations shall be inspected and approved under the pertinent provisions of this chapter.

- (a) Requirements for license.
 - 1. A Maryland home improvement contractor's license; and
 - 2. Insurance as required in § 1-14-97(C).
- (b) Scope of work.
- 1. This license permits the installation of a backflow device to an existing hose bib for a residential pool, hot tub, or spa.
 - 2. New water lines and commercial installations are prohibited.

KATHY IS CHECKING ABOUT THE WATER TREATMENT INSTALLER CATEGORY – WE WERE TOLD THAT WE COULD NOT REQUIRE THE LICENSE FOR (4) WATER TREATMENT INSTALLERS (BELOW) ACCORDING TO THE STATE REGULATIONS FOR WELL DRILLERS AND WATER TREATMENT INSTALLERS. WE NEED TO EITHER DELETE OR CHANGE BASED ON HER DIRECTION.

- (4) Water treatment installers license.
 - (a) Requirements for license.
- 1. A water conditioner installer or well driller in the water supply category, as licensed by the State of Maryland Board of Well Drillers, and
 - 2. Insurance as required by § 1-14-97(C).
 - (b) Scope of work.
- 1. This license permits water treatment appliances to be installed on existing water and sewer systems only.
- 2. All journey persons will be licensed in accordance with § <u>1-14-1(B)</u> of the Plumbing Ordinance.

NEW SECTION 1-14-4

§ 1-14-4 EXPIRATION. (New Section for clarification purposes)

ALL LICENSES IN THIS ARTICLE SHALL EXPIRE ON NOVEMBER 13TH OF EACH ODD-NUMBERED YEAR. ANY LICENSE NOT RENEWED BY THE EXPIRATION DATE

ARTICLE II: PLUMBING INSPECTOR

- NO CHANGES

\S 1-14-22. RIGHT OF ENTRY; POWER TO STOP WORK.

Qualified Inspectors, in the discharge of their official duties, and upon proper identification, shall have the authority to enter any buildings, structures or premises at any reasonable hour and are empowered to order work stopped that is not in conformity with this chapter and to require the person doing the work to correct the same.

(1959 Code, § 42-8) (Ord. 08-28-504, 11-25-2008)

§§ 1-14-23 – 1-14-35. RESERVED.

§ 1-14-39. MEETINGS; REVIEW OF PLUMBERS' CREDENTIALS; LIST OF PLUMBERS.

The Advisory Plumbing Board shall meet at such times as may be necessary but at least once during any 6 month period. They shall <u>MAY</u> review the credentials and licenses issued by the Department to all <u>ANY</u> person. s licensed by the State Board of Plumbing as state master or journeymen plumbers or county licensed master or journeymen plumbers.

(1959 Code, § 42-3) (Ord. 01-16-290, 7-12-2001; Ord. 08-28-504, 11-25-2008)

§ 1-14-40. DUTIES AS BOARD OF ARBITRATION.

The Advisory Plumbing Board shall sit as a board of arbitration with respect to any disputes that may arise involving an interpretation of the Plumbing Code or of the rules and regulations promulgated hereunder. ANY PERSON WHO REQUESTS A HEARING BEFORE THE BOARD SHALL PAY A FEE AS SET BY RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS, PRIOR TO THE SCHEDULING OF SUCH HEARING. A HEARING REQUEST SHALL BE SUBMITTED 15 DAYS PRIOR TO THE HEARING DATE.

(1959 Code, § 42-4) (Ord. 01-16-290, 7-12-2001)

New Section to be added:

§ 1-14-41. AUTHORITY TO CREATE BY-LAWS.

THE ADVISORY PLUMBING BOARD SHALL HAVE THE AUTHORITY TO CREATE BY-LAWS FOR ITSELF.

§§ 1-14-41 1-14-42 - 1-14-55. RESERVED.

Power of Board of County Commissioners to adopt Plumbing Code, see Md. Ann. Code, Art. 25, \S 3(s)(1), Art. 43, \S 325C

§ 1-14-57. AMENDMENTS.

The International Plumbing Code is hereby amended and changed as described and shown below

Section 101 is hereby amended as follows:

101.2 Scope. The exception is hereby deleted.

Section 103 is hereby deleted in its entirety.

Section 104 is hereby deleted in its entirety.

Section 104 is hereby amended as follows:

104.2 APPLICATIONS AND PERMITS. THE CODE OFFICIAL SHALL RECEIVE
APPLICATIONS. REVIEW CONSTRUCTION DOCUMENTS AND ISSUE PERMITS
FOR THE INSTALLATION AND ALTERATION OF PLUMBING SYSTEMS, INSPECT
THE PREMISES FOR WHICH SUCH PERMITS HAVE BEEN ISSUED, AND ENFORCE
COMPLIANCE WITH THE PROVISIONS OF THIS CODE.

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Section 106 is hereby deleted in its entirety.

Section 108 is hereby deleted in its entirety.

Section 109 is hereby deleted in its entirety.

Section 202 is hereby amended as follows:_____

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Administrative Authority: Is the director of the department of permits and inspections <u>DIVISION OF PERMITSTING AND DEVELOPMENT REVIEW</u>, or his designated representative.

Building Drain: That part of the lowest piping of a drainage system that receives the discharge from soil, waste and other drainage pipes inside and that extends five (5) feet (1524 mm) beyond the walls of the building and conveys the drainage to the building sewer.

Subsection 305.6 is hereby amended as follows:

305.6 Freezing. A water, soil or waste pipe shall not be installed outside of a building, in attics or crawl spaces; concealed in outside walls, or in any other place subjected to freezing

CODE EXCEPT WHERE A MORE STRINGENT REQUIREMENT IS FOUND IN COMAR 05.02.02 Maryland Accessibility Code.

- (c) Unisex toilet rooms shall include only one water closet and only one lavatory.
- (d) Unisex toilet rooms shall be located on an accessible route. Unisex toilet rooms shall be located not more than one story above or below separate-sex toilet rooms. The accessible route from any separate-sex toilet rooms to a unisex toilet room shall not exceed 500 feet/152.4m.
- (e) Unisex toilet rooms shall be designated by accessible signs. Directional signage shall be provided at all separate-sex toilet rooms indicating the location of the nearest unisex toilet room.

Section 404 is hereby deleted in its entirety.

New section 404 to read as follows:

Section 404 Accessible Plumbing Facilities: Plumbing fixtures and installation shall conform to the requirements of the INTERNATIONAL BUILDING CODE EXCEPT WHERE A MORE STRINGENT REQUIREMENT IS FOUND IN THE Code of Maryland Regulations 05.02.02 Maryland Accessibility Code.

Section 410.1 is hereby amended as follows:

410 Approval. Drinking fountains shall conform to ASME A112.19.1, ASME A112.19.2, or ASME A112.19.9M, and water coolers shall conform to ARI 1010. Drinking fountains and water coolers shall conform to NSF 61, Section 9. Where water is served in restaurants drinking fountains shall not be required. IN OTHER OCCUPANCIES, WHERE DRINKING FOUNTAINS ARE REQUIRED, WATER COOLERS OR BOTTLED WATER DISPENSERS SHALL NOT BE PERMITTED TO BE SUBSTITUTED FOR THE REQUIRED DRINKING FOUNTAINS.

Subsection 412.4 is hereby amended to add the following text:

Floor drains shall be located in toilet rooms containing two (2) or more water closets or a combination of one water closet and one urinal, except in dwelling units. Floor drains shall be required in commercial kitchens.

Subsection 415 is hereby amended to add the following new subparagraphs:

415.3 Prohibited locations. Laundry trays and mop sinks shall not be located in, nor accessed through, public restrooms.

- 3. Water heaters used in combination water/space heating systems shall be listed as complying with American National Standards (ANSI) Z21.101, Z21.10.3 or UL732, as applicable;
- 4. A water temperature control value shall be installed with every installation utilizing a combination water heating/space heating system application to limit domestic hot water temperature safe for ordinary domestic use by individuals;
- The installer must disinfect and certify the water system whenever required by the administrative authority under Section 610 of International Plumbing Code;
- 6. The system shall be equipped with a means for periodic circulation between the water heater and the exchanger during off seasons;
- 7. An acceptable means shall be provided to prevent thermal circulation through the exchanger during off seasons, except circulation necessary to comply with subparagraph (6);
- 8. A copy of the documentation to support the requirements of these subparagraphs shall be available for an inspector's review during inspections and shall remain with the unit;
- For all such devices used in Maryland, an informational sheet shall be provided that outlines all of the requirements of this subsection.

Subsection 603.2 is hereby deleted in its entirety. New subsection 603.2 to read as follows:

603.2 Separation of water service and building sewer. The water service pipe and building drain or building sewer shall not have less than one foot horizontal distance between the piping.

Table 604.4 is hereby amended to add the following text:

(Footnote) C. Metered faucets. Self closing, or self closing metering faucets shall be installed on lavatories intended to serve the transient public, such as those in, but not limited to, service stations, train stations, airports, restaurants and convention halls. Metering faucets shall deliver not more than 0.25 gallons of water per use, when tested in accordance with ANSI/ASME A112.18.1.

604.4.5 Shower heads. Shower heads shall be designed and manufactured so that they will not exceed a water supply flow rate of two and one half (2.5) gallons per minute when tested in accordance with ANSI/ASME A112.18.1 M. Exception: Emergency Safety Showers.

604.8 is hereby amended as follows:

604.8 Water pressure reducing valve or regulator. Where water pressure within a building exceeds sixty (60) psi static, an approved water pressure reducing valve conforming to ASSE 1003 with strainer shall be installed to reduce the pressure in the building water

Subsection 608.17 is hereby deleted in its entirety.

701.2 Sewer required is hereby deleted and replaced with the following:

Every building in which plumbing fixtures are installed and all premises having drainage piping shall be connected to a public sewer, where available, or an approved private sewage disposal system in accordance with Code of Maryland (COMAR) regulations.

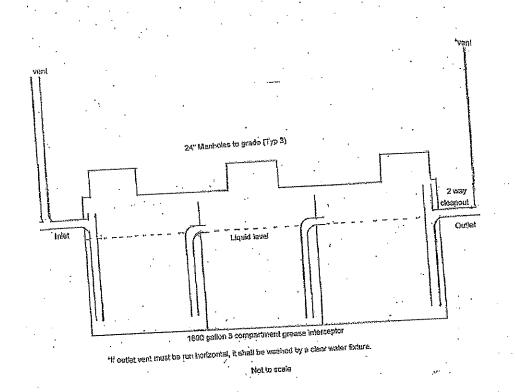
Table 710.1(1) is hereby amended to read as follows:

Footnote a. The minimum size of any building sewer shall be four (4) inches to the inside of the building.

Subdivision 701.9 is hereby amended to add the following text:

Food or drink shall not be stored, prepared or displayed beneath overhead sewer or drain pipes unless such pipes are protected against leakage or condensation reaching the food or drink as described below for new construction. In newly constructed or remodeled establishments, soil or drain pipes located over food preparation, storage, display or serving areas are undesirable. Where building design requires that soil or drain pipes be located over such areas, the installation shall be made with the least possible number of joints and shall be installed so as to connect to a vertical stack at the nearest wall or vertical building support and the construction shall be performed as follows:

- a. All openings through floors over such areas shall be provided with sleeves securely bonded to the floor construction and projecting not less than three-quarters inch above top of the finished floor with space between sleeve and pipe or duct sealed.
- Floor and shower drains installed above such areas shall be equipped with integral seepage pans.
- c. Plumbing fixtures in rooms located above such areas shall be of the wall mounted type except bathtubs. Tubs shall have waste and overflow connections made above floor and piped to the trap below the floor. Connections through floors and to traps shall conform with all other provisions of this regulation. No floor openings, other than sleeve for waste pipe, will be permitted for tubs.
- d. All other soil or drain pipes shall be of an approved material as listed in Table 702.1 and Section 702. All materials shall conform to established standards. Cleanouts shall be extended through the floor construction above.
- e. Soil and drain pipes located above such area shall be subjected to a standing water test of not less than twenty-five (25) feet.
- f. Piping subject to operation at temperatures that will form condensation on the exterior of the pipe shall be thermally insulated.



Section 1003.3.4, Grease interceptors, is hereby amended to read as follows:

Grease interceptors shall conform to PDI G101, ASME A112.14.3 or ASME A112.14.4 and shall be installed in accordance with the manufacturer's instructions.

Subsection 1003.3.5 is hereby deleted in its entirety.

subsurface disposal system, providing the facility's owner/operator applies for and obtains from the Maryland Department of Environment a water discharge permit issued pursuant to the provisions and conditions of COMAR 26.08.01–26.08.04.

Where approved and approved point of discharge.

- A. Sand and oil interceptors shall be provided wherever floors, pits, or surface areas subject to the accumulation of grease or oil from service or repair operations are drained or washed into a drainage system. Such locations include, but are not limited to: car or truck washing facilities, engine cleaning facilities, and similar operations. Drainage from such locations shall be connected to the sanitary sewer.
- B. Drains shall not be required in service or repair garages employing dry absorbent cleaning methods, however, if any drains are located in such areas, they shall discharge to the sanitary sewer through sand and oil interceptors.
- C. Drains shall not be required in parking or service garages unless the garage or portions thereof is equipped with provisions for either washing vehicles or rinsing the floor. Where such cleaning facilities are provided the area subject to waste drainage shall be provided with a system of one or more floor drains, complete with sand and oil interceptors, and the drainage from the oil interceptor shall be connected to the sanitary sewer. Any storm water shall be drained separately and directly to the storm sewer.
- D. The waste oil tank used with the oil interceptor shall not be used to store or contain any other waste oil or hazardous fluid. Crankcase oil cannot be dumped into or stored in this waste oil tank.

Subsection 1003.4.2.1 is hereby amended to add the following text.

- A. Oil separators shall have a 3" minimum discharge line and a 2" minimum vent to atmosphere. The discharge line shall have a full-size cleanout extended to grade.
- B. The oil draw-off or overflow from oil separators shall be connected to an approved waste oil tank meeting the environmental requirements of the administrative authority. The waste oil from the separator shall flow by gravity or may be pumped to a higher elevation by an automatic pump. Pumps shall be adequately sized, explosion-proof and accessible. Waste oil tanks shall have a 2" minimum pump out connection and a 1-1/2" minimum vent to atmosphere and shall be equipped with a high level alarm.
- C. Where oil separators are subject to backflow from a sewer or other point of disposal, their discharge line shall include a backwater valve installed in accordance with the requirements of Section 715.
- D. Oil interceptors, waste oil tanks, oil pump out connections, backwater valves, and atmospheric vent piping shall be permanently identified by suitable labels or markings.

Section 1201. Installation of gas appliances and gas piping. All installations of gas appliances and gas piping shall conform to requirements contained in the International Fuel Gas Code, 2003 2009, which is incorporated by reference. For installation of elevated 2 psig gas pressure use guidelines for copper tubing natural gas systems manual, incorporated by reference.

Appendix C is hereby adopted, with the following amendments:

Subsection C101.3 is hereby deleted in its entirety.

Subsection C103 is hereby deleted in its entirety.

Chapter 1 of the 2003 2009 International Fuel Gas Code is hereby deleted in its entirety.

The following incorporation by reference is hereby added:

COMAR 26.04.02 Sewage Disposal and Certain Water Systems for Homes and Other Establishments in the Counties of Maryland Where Public Sewage System Is Not Available.

COMAR 26.04.03 Water Supply and Sewage Systems in the Subdivisions of Land in Maryland.

The following requirements for show rooms, offices, shops and trucks is hereby added:

Subsection 1-14-1(f). Licensing of plumbers. Every person who holds himself or herself out to the public as a master plumber by advertising, telephone directory listing, business card, stationary, or any exhibit, shall display in a conspicuous place at his or her principal place of business and on all vehicles used for plumbing work by him or her or under his or her direction and control:

- The name or names of each registered master plumber;
- The words "registered plumber" or "registered plumbers;"
- 3) The Maryland State Certificate Number or Numbers; and
- The Frederick County Certificate Number.

(1959 Code, § 42-1) (Ord. 85-35-367, 9-3-1985; Ord. 86-29-406, 5-27-1986; Ord. 88-30-507, 6-21-1988; Ord. 91-30-030, 11-12-1991; Ord. 94-20-115, 10-18-1994; Ord. 99-11-238, 7-29-1999; Ord. 02-08-304, 4-4-2002; Ord. 05-33-394, 11-29-2005; Ord. 08-16-492, 6-17-2008)

§ 1-14-58. WELL SYSTEM INSTALLATION; SADDLE VALVES.

(A) Anything to the contrary notwithstanding in the state plumbing regulations, a minimum diameter of a 1-inch pipe shall be used for connections from submersible pumps to a storage tank as part of a well system installation.

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(B) The citation or warning, as provided for in this section, shall be in writing and shall	١	Formatted: Font color: Red, Strikethrough
contain the following;		Formatted: No underline, Font color: Red,
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(1) The name and address of the person charged or warned;		Formatted: Font color: Red, Strikethrough
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(2) The nature of the violation;		Strikethrough
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(3) The location of the violation;	······································	Formatted: No underline, Font color: Red,
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(4) The date(s) of the violation;	ir.	Formatted: Font color: Red, Strikethrough
(5) The amount or potential amount of the fine assessed;	100	Formatted: No underline, Font color: Red, Strikethrough
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(6) The manner, location and time in which the fine may be paid, or violation corrected,	1 3	Formatted: No underline, Font color: Red,
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if applicable;	//,	Formatted: Font color: Red, Strikethrough
. (7) The person's right to stand trial for the violation if applicable;	//	Formatted: No underline, Font color: Red,
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(8) A certification by the Director ADMINISTRATIVE AUTHORITY or his authorized	11	Formatted: Font color: Red, Strikethrough
agent attesting to the truth of the matters set forth,	/ / /	Formatted: No underline, Font color: Red,
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(C) Whenever an alleged or possible civil plumbing infraction comes to the attention of the	[[,	Formatted: Font color: Red, Strikethrough
(C) Whenever an alleged of possible civil planting in Mutation of Permits and Inspections ADMINISTRATIVE AUTHORITY, the following	//	Formatted: No underline, Font color: Red,
Director of Permits and Inspections (Inspections)	٠/١	Strikethrough
procedures shall apply;	/ /	Formatted: Font color: Red, Strikethrough
(1) The Director of Permits and Inspections ADMINISTRATIVE AUTHORITY will	1/	Formatted: No underline, Font color: Red, Strikethrough
investigate whether an infraction has occurred;	11	Formatted: Font color: Red, Strikethrough
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(2) If the Director ADMINISTRATIVE AUTHORITY finds that an infraction has	S. J.	Strikethrough
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in this section, with reasonable time stated to about of to proven a section,	٧,	Formatted: No underline, Font color: Red,
(3) If the infraction continues or is allowed to occur after the reasonable time stated, the		Strikethrough
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the form and manner as outlined in this section. From instancing the prior issuance of a warning, the Director may issue a citation at step (2) without the prior issuance of a warning.		Formatted: Font color: Red, Strikethrough
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(M) The fines specified in this section can be modified at any time by resolution of the Board of County Commissioners of Frederick County, after a duly advertised public hearing.

(Ord. 99-11-238, 7-29-1999),

§§ 1-14-63 - 1-14-75. RESERVED.

DELETE ENTIRE "DIVISION 2. INSPECTIONS" SECTION

NOTE: MOVE THE REFERENCE FOR VIEWING THE DRAWING TO IMMEDIATELY FOLLOWING \$1-14-59.

DIVISION 2. INSPECTIONS.

S 1-14-76. REQUIRED.

All work done under the Plumbing Code shall be subject to inspection and approval by the Plumbing Inspector. The responsibility for requesting an inspection shall rest entirely with the person performing the work. No work shall be covered or concealed until it has been properly inspected. Improper workmanship shall be remedied and unsatisfactory materials shall be replaced as ordered by the Inspector and after such corrections it shall be reinspected.

(1959 Code, § 42-17),

\$ 1-14-77. FIRST INSPECTION.

All soil lines, drains, vents and water lines inside of buildings shall be inspected after they are roughed in and before they are covered. All outside sewer facilities shall be inspected after installation and before covering. Any pump connected with a well or water line to a facility shall be inspected before being covered.

(1959 Code, § 42-18),

§ 1-14-78. FINAL INSPECTION.

All work shall be given an inspection and receive final approval after all plumbing fixtures and appliances connected with the water or sewer systems are set, sewers and wells are covered.

(1959 Code, § 42-19) (Ord. 94-20-115, 10-18-1994)

§ 1-14-79. ADDITIONAL INSPECTIONS,

__ In addition to the other required inspections, the Plumbing Inspector may make such other inspections as he deems necessary.

(1959 Code, § 42-20)

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ARTICLE V: SCOPE AND ADMINISTRATION

Section

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<u>1-14-90</u>	PERMITS Required
<u>1-14-91</u>	Application generally
<u>1-14-91.1</u>	Special provisions for homeowners
1-14-92 renumber the	—Special provisions for private water and sewer systems (DELETE) (Kathy — n, 1-14-91.1 to 1-14-92?)
<u>1-14-93</u>	Special provisions for public water and sewer systems
1-14-94	Fees
<u>1-14-95</u>	Transfer
<u>1-14-96</u>	Expiration
<u>1-14-97</u>	Appliance installers (moved to Article I) Replace with: <u>SUSPENSION OR</u> <u>REVOCATION</u>
1-14-98	CIVIL PLUMBING INFRACTIONS (moved from Article IV)
1-14-99	PENALTIES (moved from Article IV)

Cross reference:

Local law relating to permits, see § 2-13-21

Statutory reference:

Permits, see Md. Ann. Code, Art. 25, § 3(s)(1)

§ 1-14-90. PERMITS REQUIRED.

(A) No person shall perform any plumbing work as defined in the State Plumbing Code adopted in this chapter or install any plumbing appliance which affects or connects with any water supply, sewage disposal or plumbing system or remodel, alter or install any septic tank system or appliances connected with any water or sewer system without a permit issued by the Plumbing Inspector ADMINISTRATIVE AUTHORITY.

proposed plumbing work. If, in the opinion of the Plumbing Inspector, the description is not adequate to cover the proposed work, 2 sets of plans in such detail as is necessary must be submitted to the Plumbing Inspector when application is made. All plans shall be in accordance with the Plumbing Code.

(1959 Code, § 42-11)

§ 1-14-91.1. SPECIAL PROVISIONS FOR HOMEOWNERS.

If the plumbing permit is for work to be done by the property owner himself, such permit shall not be issued unless such property owner signs a homeowner's affidavit stating that he occupies or will immediately occupy the house himself. The licensing provisions of § 1-14-1 shall not apply to the owner of a residential single family dwelling wherein he or she resides or is about to reside, who obtains a homeowner's plumbing permit. To obtain this permit the owner must sign a homeowner's affidavit on file in the Office of Permits and Inspections, and successfully pass with a grade of 70% or more an examination, which will consist of 10 code questions. This examination will be given in the Office of Permits and Inspections and will be an open book examination but without the assistance of any other person. This examination will not be allowed to be taken outside of the Office of Permits and Inspections. The questions for the examination will be determined by the Chairperson of the Advisory Plumbing Board, the Chief Plumbing Inspector, and the Director of Permits and Inspections. The owner will be required to produce a photo identification before being allowed to take the examination. The owner of a residential dwelling who signs a homeowner's affidavit for a plumbing permit, after successfully passing an examination, shall have his or her permit granted. The owner can do plumbing work except for natural and propane gas piping. All such private work must be inspected and meet all requirements of this chapter before it is ready for use or the work covered or closed.

(1959 Code, § 42-10) (Ord. 94-20-115, 10-18-1994; Ord. 99-11-238, 7-29-1999; Ord. 01-16-290, 7-12-2001)

DELETE § 1-14-92

§ 1-14-92. SPECIAL PROVISIONS FOR PRIVATE WATER AND SEWER SYSTEMS.

All applications for connections to public water and sewer systems shall give an exact location of the building site, the owner thereof, the licensed county plumber, the builder, size of such property and the type of water supply or disposal system. After such application has been duly processed by the Plumbing Inspector's office it shall be delivered to the County Health Department as to Department for processing and approval. When approved by the County Health Department as to sanitary health requirements, the application shall be returned to the office of the Plumbing Inspector who shall issue to the applicant a septic system construction permit upon payment of fees as set forth in this article.

(1959 Code, § 42-12)

§ 1-14-97 SUSPENSION OR REVOCATION.

THE CODE OFFICIAL SHALL HAVE THE AUTHORITY TO SUSPEND OR REVOKE A PERMIT ISSUED UNDER THE PROVISIONS OF THIS CODE WHEREVER THE PERMIT IS ISSUED IN ERROR OR ON THE BASIS OF INCORRECT, INACCURATE OR INCOMPLETE INFORMATION, OR IN VIOLATION OF ANY ORDINANCE OR REGULATION OR ANY OF THE PROVISIONS OF THIS CODE.

MOVE CITATION AND PENALTIES SECTIONS FROM ARTICLE IV TO THIS ARTICLE V:

§ 1-14-62 98. CIVIL PLUMBING INFRACTIONS.

- (A) Pursuant to Chapter 634 of the Laws of Maryland 1984, being § 2-2-29 of the Frederick County Code, any violation of any of the provisions of this entire chapter, which is Chapter 1-14 entitled "Plumbing," is a civil infraction and shall be called a civil plumbing infraction. If, after investigation, a civil plumbing infraction is believed to exist, the Frederick County ADMINISTRATIVE AUTHORITY or his authorized agent shall deliver a citation or warning to the building owner and others responsible for the infraction. If the ADMINISTRATIVE AUTHORITY or his authorized agent is unable to locate the owner personally, the ADMINISTRATIVE AUTHORITY or his authorized agent may post the citation or warning in a conspicuous place on the property of the owner and mail a copy of same to the person, which shall be sufficient for delivery under this section.
- (B) The citation or warning, as provided for in this section, shall be in writing and shall contain the following:
 - (1) The name and address of the person charged or warned;
 - (2) The nature of the violation:
 - (3) The location of the violation;
 - (4) The date(s) of the violation;
 - (5) The amount or potential amount of the fine assessed;
- (6) The manner, location and time in which the fine may be paid, or violation corrected, if applicable;
 - (7) The person's right to stand trial for the violation if applicable;
- (8) A certification by the ADMINISTRATIVE AUTHORITY or his authorized agent attesting to the truth of the matters set forth.

- (I) If a person is found by the district court to have committed a civil plumbing infraction, that person shall be liable for the costs of the proceedings in the district court.
- (J) Depending on the circumstances of each case and after consultation with the County Attorney, the ADMINISTRATIVE AUTHORITY has the discretionary authority to reduce or suspend all or a portion of the fine payable through the Permits and Inspections Office.
- (K) Nothing contained in this section shall prohibit or prevent the ADMINISTRATIVE AUTHORITY, or anyone else, from seeking other legal remedies, such as injunctions or criminal prosecution.
- (L) Provisions of this section are in addition to, not in lieu of, those penalties specified in other sections of this chapter, specifically § 1-14-61.
- (M) The fines specified in this section can be modified at any time by resolution of the Board of County Commissioners of Frederick County, after a duly advertised public hearing.

(Ord. 99-11-238, 7-29-1999)

§ 1-14-61 99. PENALTIES.

Any person, whether individually or as a member or employee of a partnership, an officer, agent or employee of a corporation, who directs or knowingly permits any violation of any of the provisions of the sections of the Plumbing Code, or any rule or regulation duly promulgated there under or who aids or assists therein, either on his own behalf or in the interests of his employer or principal shall, upon conviction thereof by a court of competent jurisdiction, be guilty of a misdemeanor punishable by a fine of not more than \$100 or by imprisonment for not more than 30 days, or both, for each separate violation. Every day such violation exists shall constitute a separate offense and be punishable as such.

(1959 Code, § 42-21)

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

Ice and Snow Accumulations on Roofs

All properly built roofs, whether for animal housing, commercial applications or residences, are built to withstand a "design" snow and ice load. The snow design load is based upon the expected frequency and severity of snowstorms. It also considers such factors as the type of structure, its construction and the risk to human life and safety.

In Arkansas, the design snow load for animal housing is typically about 5 to 10 lbs. per square foot. For residents, commercial buildings and essential services such as hospitals, the design snow loads can be as high as 25 pounds per square foot.

It should be remembered that the snow load is only a portion of the total design load, which will include wind and dead loads. Dead loads are loads that account for the weight of the roof structure itself. While the total design load may be 2 to 4 times greater than the design snow load alone, the weight of the snow, if it exceeds the design snow load, may cause structural failure. If the blueprint and construction documents for the structure are available, they should provide the design snow load.

Clearly, poor materials, construction and postconstruction maintenance can result in a weaker structure with an actual load capacity significantly lower than the design load. Therefore, proper materials and techniques should be followed for construction. After construction, proper maintenance is vital and any damage should be repaired as soon as possible. Knowledgeable professional assistance should always be sought.

The presence of snow and ice on a roof exerts vertical loads that can cause a roof to sag or bow downward. This loading also transfers horizontal forces that may cause the walls to deflect, or move slightly outward. Depending on the construction design, the deflection may be at the top or bottom of the wall.

When roof loads are below the actual load capacity, any sagging or deflection that occurs is temporary and will disappear after the load is removed. This level of loading and minor sagging or deflection of the roof structure will probably not be noticed. When the loading exceeds the design loads, the sagging and deflections become permanent. In extreme cases the roof collapses.

An assessment of the risk of snow and ice accumulation on roofs, as with any potential disaster, is to:

- Determine what is at risk,
- What is the level of risk,
- What if, anything can be done to avoid or minimize the damage, and
- What are the potential adverse outcomes of the action.

For example, if you leave the ice and snow on a roof, the roof may risk collapse. If you remove the snow, brittle shingles are likely to be damaged, or the person removing snow may get injured. The expense and liability of having someone else remove the snow needs to be considered before taking action.

It is important to ask, is it possible and practical, with the available equipment and labor, to remove the snow and ice? What about the health and safety of the individual who is working on a snow and ice covered roof?

The first step to help answer these types of questions is to determine the design snow load of the structure. If plans and construction documents can be obtained, they should provide this information. A professional who is knowledgeable in construction practices may be of assistance. Finally, the general rule of thumb above provides some guidance.

It is also important to remember that poor materials and construction combined with poor building maintenance may result in actual loadbearing capacities being lower than the design snow load. So, the building condition must be considered.

The next step is to determine if the current snow load, or the potential snow load, is greater than the load-bearing capacity of the building. The most rapid method to do this is a visual inspection. If there is no detectable sagging of the roof line or no horizontal deflection of the walls, the load-bearing capacity probably has not been exceeded. If visible roof and wall deflections occur, it is very likely that the load-bearing capacity has been exceeded and there is an increased potential for damage.

A difficulty with the visual approach is that one cannot estimate the actual load on the roof for comparison with the design load.



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Why do some buildings collapse in winter while many do not?

Friday, January 04, 2008

By Lorre Kolb

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Madison, Wis. – Near record amounts of snow this winter have raised concerns about roof collapses. Snow and ice accumulations on roofs cause a loading which can cause roof collapse when the roof is not strong enough to resist the load. The deeper the snow, the higher the loading.

Brian Holmes and David Kammel, University of Wisconsin-Madison/Extension professors and specialists note that the more dense the snow and ice, the greater the load for a given depth. Rain held in snow can add about 5 pounds per square foot per for each inch of rain.

They added, "Wind blown-off and snow slide-off can reduce snow load on a roof. However, snow drifting onto leeward or lower roofs and valleys and snow slide onto lower roofs can add significant loads from accumulated snow."

For two buildings constructed with the same strength, the one with the largest snow load should be of most concern to the owner, according to Holmes and Kammel. In addition to estimating the roof loading, it's important to know the loading the roof can resist.

Wisconsin's Uniform Dwelling Code requires one and two-family residences in southern Wisconsin be designed to withstand a uniform snow load of 30 pounds per square foot and those in the north to support a 40 pound per square foot load. Required design snow loads for the State's commercial buildings are calculated on a case-by-case basis, with design snow loads for those in the far north often exceeding 60 pounds per square foot.

Holmes and Kammel said, "Building plan approval and subsequent construction inspection do not always guarantee a building has been designed and constructed in accordance with State codes. Agricultural buildings are exempt from the State's building codes, which means farmers must work with their builders to establish the minimum snow loading to be used in the design of any new structure."

Roof failures can occur in buildings at snow loadings lower than those for which they were designed because of one or more of the

Estimating load on a roof

The following table and example equations can be used to estimate the load on a roof.

Approximate Density (lb/ft2 /ft depth)
5-20
20-40
40-58
58

Calculated Roof Loading (lb/ft2) = Depth (ft) x Density (lb/ft2 /ft depth)

Example: Two (2) foot depth of packed snow

Calculated Roof Loading (lb/ft2) = 2 ft x 30 lb/ft2 / ft = 60 lb/ft2

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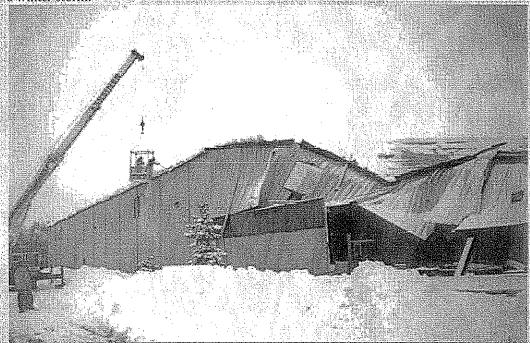


Risktopics

snow loading roof collapse

Roof Collapse Due to Winter Storms

Winter storms, including rain, snow and ice account for several roof collapses each year. These collapses account for millions of dollars in property damage and interruption of production and operations. Are you prepared for the next winter storm? Is your building capable of handling the load from a heavy snow? This Risk Topic is intended to help plant management implement appropriate procedures and inspections to deal with the perils from a winter storm.



It is not just the blizzard that produces a single significant snow fall that causes a roof system to fail. Repeated snow events that do not have time to melt can accumulate and surpass the roof design's live load. Equally important is a snow event followed by rain. The rain will saturate the snow, which will greatly increase the weight of the snow.

Before the Next Winter Storm

Here are some action items that you can take to reduce the chance of experiencing a roof collapse:

- 1. Know the live load design of all sections of your roof. This will let you know how much snow your roof can safely handle. Since lower roof elevations typically promote drifting snow, these areas are typically designed with greater roof strength. If your roof strength is not known, contact a structural engineer to determine the live load your roof can support. Structural reinforcing should be performed, especially on lower roofs, as needed.
- 2. Inspect and clean roof drains, gutters and downspouts each fall
- Solicit a local roofing contractor that will assist in snow removal. Have the roofing contractor on retainer, if possible.

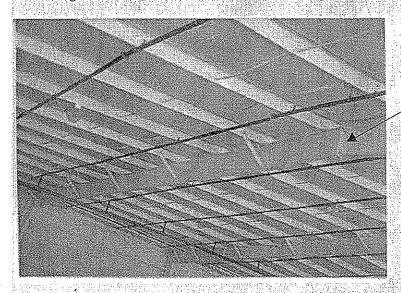
Warning Signs Associated with Potential Roof Collapse

Prior to a roof collapse, buildings generally exhibit signs that the roof is in distress and action should be taken to mitigate a roof collapse. The following are some of the symptoms that have been reported prior to roof failure:

- 1. sagging roof steel visually deformed
- 2. cracked or split wood members
- 3. sprinkler heads pushed down below ceiling tiles
- 4. doors that pop open
- 5. doors or windows that are difficult to open
- 6. bowed utility pipes or conduit attached at celling
- 7. creaking, cracking or popping sounds

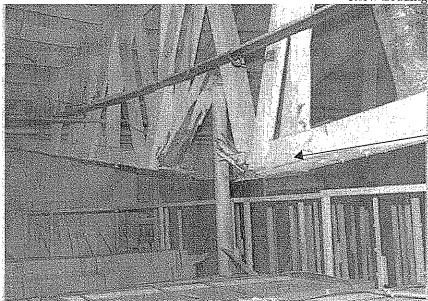
Plumb bobs and other laser-type leveling tools can be used for tracking the following:

- 1. bowing of truss bottom chords or web members
- 2. bowing of rafters or purlins
- 3. bowing of headers or columns



Deformed Roof Steel

Snow Loading Roof Collapse 5 of 7



Broken Wooden Truss

Snow Removal Preparation

The removal of snow accumulations on roofs, which will take the weight off the roof, is the best way to prevent a loss. It is important to consider how snow removal will be performed in advance of the snow season. The following items should be considered:

- 1. Evaluate if snow removal can be performed safely by plant personnel maintain removal equipment on site (snow blower, shovels, wheelbarrow, etc.)
- 2. Evaluate if plant personnel can remove the snow in a timely manner.
- 3. Select a roofing contractor in advance and retain them on contract.
- 4. The use of salt on most roofs will void the manufacturer's warranty.

Snow Removal

It is important to follow proper snow-removal procedures. A plan should be developed based on your building's layout. Improper snow removal can create undesired loading on a roof. Follow these procedures to properly remove snow from your roof.

- Drifted snow should be removed first, which will generally be on lower roofs. Drifted snow can
 also occur around rooftop mechanical vents, skylights, parapet walls and around perithouse walls.
- 2. Snow should be removed from the middle of the bays first. (i.e., if your building has 50 foor bays with the primary steel running from the peak to the eave, the snow should be removed from the center of the bay starting at the peak and working toward the eave.) The greatest deflection will occur at the center of the bay. This should be repeated for all the bays.
- 3. It is important to remove snow evenly from both sides of the roof so that the live load on one side of the roof is not significantly greater than the other side. For peaked roofs, the snow should be removed from the center of a given bay on one side of the roof and then the snow should be removed on the same bay on the other side of the ridge or peak.
- 4. Do not pile snow from upper roofs onto lower roofs.
- 5. Take care while removing snow and/or ice accumulation to prevent damage to the roof membrane. Avoid removal within 2 inches of the surface of the roof membrane. The use of plastic snow shovels is recommended.

REFERENCES

- Open Web Steel Joists Roof and Floor Loading Guidelines. Province of Nova Scotia. Crowne-2003.
- 2. Snow Loading & Roof Failures Alert. Ontario Recreation Facilities Association Inc. Facility Alert, 2002-03.
- 3. Winter Snow Loads: Curt Gooch, Sr.: Cornell University. 2002
- 4. Roof Snow Loads William J. Abngell. University of Minnesota Extension Service: Regents of the University of Minnesota, 2003.
- 5. Snow Load on Buildings. Michael J. O'Rourke. American Scientist, January February 1997.
- National Oceanic and Atmospheric Administration. National Weather Service: National Operational Hydrologic Remote Sensing Center (NOHRSC) Snow Model (NSM), 2003.

National Weather Service - NOHRSC Snow Model (NSM)

- National Snow Water Equivalent The latest national snow water equivalent map from the NOHRSC Snow Model (NSM) can be obtained from www.nws.noaa.gov.:
- The data is updated every 12 hours.
- The snow water equivalent should be used to determine actual snow load based on accumulation depth.



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